

REMARKS

The application has been reviewed in light of the final Office Action dated April 15, 2008. Claims 1-9 were pending, with claims 10-38 having previously been canceled, without prejudice or disclaimer. By this Amendment, claims 39-47 have been added. Accordingly, claims 1-9 and 39-47 would be pending upon entry of this Amendment, with claims 1, 41, and 44 being in independent form.

Claims 1 and 3-9 were rejected under 35 U.S.C. § 103(a) as purportedly unpatentable over Maki et al. (US 2002/0126193 A1) in view of Kuwabara et al. (JP2004-99280) and further in view of U.S. Patent No. 5,121,170 to Bannai et al.

Applicant submits that the present application is allowable over the cited art, for at least the reason that the cited art does not disclose or suggest the aspects of the present application of (a) controlling a charger to neutralize an amount of electric charges on the surface of the recording medium and (b) adjusting the amount of the electric charges on the surface of the recording medium in accordance with a resistance value of the recording medium, to cause the electric charges on the surface of the recording medium to neutralize. Each of independent claims 1, 41 and 44 addresses such aspect, as well as additional features. Such aspects of the present application prevents ink droplets from being influenced by an electric field when ejected from a recording head towards the recording medium. Applicant found through substantial investigation that, as discussed in the application at paragraph [0115], it takes time for the charges on the surface of the recording medium to neutralize, and a time period until the charges disappear depends on the resistance of the recording paper and the charge period length.

Maki, as understood by applicant, proposes a configuration of a recording-medium conveying device directed to enhance precision of conveyance of the recording medium, wherein

a conveying belt includes an insulating layer formed at one side contacting the recording medium, and a belt charging unit is provided in contact with the insulating layer so as to charge the insulating layer. In Maki, charges applied to a surface of a recording medium are inverses to charges applied to the conveying belt. Thus, when, for example, positive charges are applied to the conveying belt, negative electric charges are applied to the surface of the recording medium.

However, Maki does not disclose or suggest adjusting the amount of the electric charges on the surface of the recording medium *in accordance with a resistance value of the recording medium*, to cause the electric charges on the surface of the recording medium to neutralize.

Kuwabara, as understood by Applicant, proposes a paper carrying device including an electrostatic attraction belt 5 applied around a conductive roll 2 on a grounded paper feeding side and a conductive roll 3 on a paper delivery side, and an electrifying roll 10 connected to a direct current high voltage power supply 15 which is brought into contact with the conductive roll 2 of the paper feeding side through the electrostatic attraction belt 5. In the paper carrying device proposed in Kuwabara, a paper sheet 7, after passing over the electrifying roll, is electrostatically attracted to and carried by the conveyance belt.

Kuwabara proposes that the electrical potential difference caused by the direct current high voltage power supply 15 upon the electrifying roll 10 can be adjusted according to various factors (such as temperature, humidity, thickness, surface treatment, etc.) in order to enhance adsorption power, that is, so that the paper is securely carried on the electrostatic attraction belt 5.

However, Kuwabara says nothing whatsoever regarding controlling a charger to neutralize an amount of electric charges on the surface of the recording medium.

Further, neither Maki nor Kuwabara (nor any of the other references) discloses or

suggests adjusting the amount of the electric charges on the surface of the recording medium *in accordance with a resistance value of the recording medium*.

Bannai, as understood by Applicant, proposes a device for transporting sheet members which applies an AC voltage to a conveyance belt to provide an electrostatic attraction force, adhering the sheet members to the belt.

However, Bannai does not disclose or suggest that the device be equipped with *any* means to control the amount of electric charges on the surface of the recording medium. The description given in Bannai in Column 7, Line 46 – Column 8, Line 31 and Figure 2A refer only to an experiment showing the relationship between the electrostatic attracting force of the belt and the charge pattern and voltage applied to the conveyance belt.

Further, Bannai does not disclose or suggest adjusting the amount of the electric charges on the surface of the recording medium *in accordance with a resistance value of the recording medium*.

Applicant submits that the cited references, even when considered along with common sense and common knowledge to one skilled in the art, would not render obvious the above-mentioned aspect of the present application.

Accordingly, applicant respectfully submits that independent claims 1, 41 and 44, and claims depending therefrom, are patentable over the cited art.

The Office Action indicates that claim 2 is objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, since independent claim 1 is submitted to be patentable over the cited art, no changes to the form of claim 2 is believed to be necessary.

Applicant appreciates the Examiner's statement of reasons for the indication of allowable subject matter in the Office Action and submits that the allowable subject matter further supports patentability for reasons in addition to those identified in the Examiner's statement of reasons for allowance in the Office Action.

In view of the remarks hereinabove, Applicant submits that the application is now in condition for allowance, and earnestly solicits the allowance of the application.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition. The Patent Office is hereby authorized to charge any fees that are required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Respectfully submitted,

  
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